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# NOTICE OF ALLOWANCE AND FEE(S) DUE

45601 7590 122992009 SCULLY, SCOTT, MURPHY & PRESSER, P.C. 400 GARDEN CITY PLAZA Suite 300 GARDEN CITY NY U530 EXAMINER

NGUYEN, KHIEM D

ART UNIT PAPER NUMBER

2823

DATE MAILED: 12/29/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.			
10/711,144	08/27/2004	Douglas D. Coolbaugh	BUR920040107US1	5143			
ITTLE OF INVENTION: MOS VARACTOR USING ISOLATION WELL							

 APPLN. TYPE
 SMALL ENTITY
 ISSUE FEE DUE
 PUBLICATION FEE DUE
 PREV. PAID ISSUE FEE
 TOTAL FEE(S) DUE
 DATE DUE

 nonprovisional
 NO
 \$1510
 \$300
 \$0
 \$1810
 03/29/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

# PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further e indicated unless correcte maintenance fee notificat	form should be used for correspondence includir d below or directed oth ions	or transmitting the IS og the Patent, advance nerwise in Block 1, by	SUE FEE and PUBLICAT orders and notification of (a) specifying a new corre						
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers, Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.					
400 GARDEN C Suite 300			T be	Cert	ificate	e of Mailing or Trans: s) Transmittal is being ficient postage for firs ISSUE FEE address I) 273-2885, on the d	mission	with the United	
GARDEN CITY	, NY 11530							(Depositor's name)	
								(Signature)	
								(Date)	
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TITLE OF INVENTION:									
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nonprovisional	NO	\$1510	\$300	\$0	\$0 \$1810		03/	29/2010	
EXAM	INER	ART UNIT	CLASS-SUBCLASS	]					
NGUYEN,	KHIEM D	2823	438-381000	-					
1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.563).  Change of correspondence address (or Change of Correspondence Address from PTO/SB/122) attended to the Address Tendence of Correspondence Address Tendence of Correspondence Address Tendence of Tend			(I) the names of up to or agents OR, alternati (2) the name of a sing registered attorney or 2 registered patent atto listed, no name will be	For printing on the patent front page, list ) the names of up to 3 registered patent attorneys agents OR, alternatively, up the name of a single firm thaving as a member a gistered attorney or agent) and the names of up to select, no name will be printed.					
	ess an assignee is ident nin 37 CFR 3.11. Comp	ified below, no assign eletion of this form is N	N THE PATENT (print or ty ee data will appear on the p OT a substitute for filing an (B) RESIDENCE: (CITY	atent. If an assigne assignment. and STATE OR C	OUNT				
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5. Change in Entity Stat	SMALL ENTITY state	is. See 37 CFR 1.27.	☐ b. Applicant is no lon	ger claiming SMAL	LEN	ΓΙΤΥ status. See 37 Cl	R 1.27(g)(2	).	
NOTE: The Issue Fee and interest as shown by the r	l Publication Fee (if req ecords of the United Sta	uired) will not be accep tes Patent and Tradema	oted from anyone other than ark Office.	he applicant; a regis	tered	attorney or agent; or th	e assignee o	r other party in	
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45601 75	590 12/29/2009		EXAMINER			
SCULLY, SCOTT, MURPHY & PRESSER, P.C. 400 GARDEN CITY PLAZA			NGUYEN, KHJEM D			
			ART UNIT	PAPER NUMBER		
Suite 300 GARDEN CITY, NY 11530			2823 DATE MAILED: 12/29/200	9		

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 145 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 145 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

# Application No. Applicant(s) 10/711,144 COOLBAUGH ET AL. Notice of Allowability Examiner Art Unit KHIEM D. NGUYEN 2823 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to the RCE filed on October 15<sup>th</sup>, 2009. The allowed claim(s) is/are 1-3,6-9 and 12-14. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) \( \subseteq \text{Some\* c) \subseteq \text{None of the:} a) $\square$ All 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. X Examiner's Amendment/Comment Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material

/Khiem D. Nguyen/

Primary Examiner, Art Unit 2823

9. ☐ Other

12/16/2009

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# EXAMINER'S AMENDMENT

### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicants' submission filed on October 15<sup>th</sup>, 2009 has been entered.

2. Claims 1 and 9 have been amended. Accordingly, claims 1-3, 6-9, and 12-20 are

further consideration as being drawn to non-elected invention.

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

pending in this application in which claims 15-20 have been withdrawn from

4. The application has been amended as follows:

# In the claims:

This application is in condition for allowance except for the presence of claims 15-20 directed to non-elected invention without traverse. Accordingly, claims 15-20 have been cancelled.

Please cancel claims 15-20.

Allowable Subject Matter

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5. Claims 1-3, 6-9 and 12-14 are allowed over prior art of record.

#### Reasons For Allowance

6. The following is an examiner's statement of reasons for allowance:

After further search and consideration of Applicants' response filed on October 15th, 2009 (see Applicants' argument in Page 8, lines 9-20 of the October 15<sup>th</sup>, response), it is determined that the prior art of record neither anticipates nor renders obvious the claimed subject matter of the instant application as a whole either taken alone or in combination, in particular, prior art of record does not teach or suggest "wherein the outer well region and the inner well region each have an upper surface that includes a source and drain dopant regions, wherein the source and drain regions of the inner well regions are separated from the source and drain dopant regions of the outer well regions by the isolation region comprising a dielectric material" as cited in independent claim 1 and "wherein the outer N-well region and the inner P-well region each have an upper surface that includes source and drain dopant regions, wherein the source and drain dopant regions of the inner P-well regions are separated from the source and drain regions of the outer N-well regions by the isolation region comprising a dielectric material", as recited in independent claim 9.

Claims 2, 3, 6-8 and 12-14 are also allowed as being directly dependent of the allowed independent base claims.

7. Any comments considered necessary by applicant must be submitted no later

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than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Conclusion

- The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
  - Hull et al. (U.S. Patent 6,172,378) disclose an integrated circuit varactor structure that include either an P-gate/N-well or N-gate/P-well layer configuration formed on an SOI substrate.
  - Stolmeijer et al. (U.S. Patent 5,742,090) disclose an integrated circuit device has a plurality of active devices which are formed on a semiconductor body.

# Correspondence

 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khiem D. Nguyen whose telephone number is (571) 272-1865. The examiner can normally be reached on Monday-Friday (8:30 AM - 5:30 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew S. Smith can be reached on (571) 272-1907. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Khiem D. Nguyen/ Primary Examiner, Art Unit 2823 December 16<sup>th</sup>, 2009